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The prioritisation of vision and touch during clothing purchase decisions: preliminary evidence for a hierarchical sensory process of clothing evaluation

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ABSTRACT

Despite studies highlighting sensory experiences in general shopping environments, there is a paucity of research examining the relative importance of the four senses – vision, touch, smell, and sound – concerning clothing itself during clothing purchase decisions. The present study investigated this topic using a mixed-methods approach; Study 1 adopted semi-structured interviews (five fashion industry professionals) and Study 2 generalised Study 1's findings through an online survey (155 female participants). In both studies, vision emerged as the most prioritised sensory modality, followed by touch. Smell and sound, while deemed equally important, were the least influential of the four senses. Study 2 also examined whether individual differences (i.e. age & fashion expertise) influenced this prioritisation. The results indicated that fashion expertise was positively associated with the prioritisation of the visual element of stylistic uniqueness. These findings provide preliminary evidence for the possibility of hierarchical sensory processes involved in clothing purchase behaviours.

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KEYWORDS

Fashion psychology; sensory marketing; hierarchical sensory evaluation; individual differences; expertise

1. Introduction and literature review

Clothing is fundamental to everyday life, serving as a physical barrier between the self and the outside world (Barthes, 2006). In particular, clothing conveys symbols and meanings through its design elements and physical attributes, eliciting sensory interpretations and evaluations based on sight, touch, sound, and smell (Lund, 2015).

Although recent research has explored the roles of visual cues (Ko, Lee, Kim, Oh, & Yin, 2025) and senses beyond vision, such as touch, sound, and smell (Helmefalk & Berndt, 2018; Krishna, 2012; Lund, 2015; Soars, 2009; Yoganathan, Osburg, & Akhtar, 2019) in the general retail and shopping environment, little research has been conducted on the sensory experiences of clothing independent of the shopping environment. Specifically, little is known about the relative importance of different clothing-related sensory attributes when evaluating clothing for purchase and whether this can be generalised across larger numbers of people.

The present research adopts a mixed-methods approach to exploring this research gap. Study 1 employs semi-structured interviews to explore and identify key sensory attributes of clothing in everyday clothing

evaluation. Study 2 uses some of the extracted sensory attributes from Study 1 and attempts to generalise Study 1's findings via an online survey. Furthermore, Study 2 investigates the degree of this generalizability by assessing the role of individual differences, specifically focusing on age and fashion expertise. Together, these studies aim to enhance the understanding of the relative importance of multiple sensory elements in the experience of clothing evaluation in the context of consumption.

1.1. The role of sensory input on clothing evaluations

Clothing, as an external object to a viewer, is initially perceptually processed and evaluated through its sensory design elements. The evaluation of the sensory component of clothing has been studied in the context of psychological and aesthetic responses such as preference, liking, and wanting (Hur, Etcoff, & Silva, 2023; Hur, Segal, Etcoff, & Silva, 2025; Ko et al., 2025), and consumption decisions (Eckman, Damhorst, & Kadolph, 1990). Theoretical models in psychology – particularly in empirical aesthetics (Chatterjee, 2004;

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Leder, Belke, Oeberst, & Augustin, 2004) – highlighted the role that sensory attributes of objects play in their psychological and higher-level aesthetic evaluations.

What are the key clothing-related sensory inputs that hold importance in the evaluation of clothing? In the existing literature, visual elements have been studied most frequently as precursors of clothing evaluation, particularly colour (Ko et al., 2025; Kodžoman, Hladnik, Pavko Čuden, & Čok, 2022; Neacșu, Balasescu, Baltescu, & Boșcor, 2017), style (Barquet & Balam, 2015; Ko et al., 2025; Reid, Lancuba, & Morrow, 1997; Workman & Kidd, 2000), fit/size (Alexander, Connell, & Presley, 2005; Chowdhary & Beale, 1988), and visual context (Hur & Burechittinanta, 2026). Although to a lesser degree, modalities beyond vision have also been studied in the context of clothing evaluation, such as touch (Grohmann, Spangenberg, & Sprott, 2007), sound (Garlin & Owen, 2006; Milliman, 1986), and smell (Lund, 2015; Spangenberg, Sprott, Grohmann, & Tracy, 2006). To date, it is, however, still unclear how these sensory components are prioritized. Although research may suggest the primacy of vision in the human perceptual system (Wandell, Dumoulin, & Brewer, 2009), the experience of clothing is ultimately multisensory, involving an active physical engagement with clothing (e.g. touch and smell) as well as visual inspection. If so, whether certain modalities are prioritised in the interaction with clothing – the possible presence of a hierarchical sensory process in clothing evaluation – is critical in how one interacts with and understands clothing in everyday life.

1.2. Individual differences and sensory evaluations

The role of sensory inputs from the clothing itself notwithstanding, it is also unlikely that the impact of these item characteristics applies uniformly across everyone. Previous works have demonstrated that individual differences such as age, gender, and personality are known to impact clothing evaluations (Bell, Holbrook, & Solomon, 1991; Hogge, Baer, & Kang-Park, 1988; Kim & Lee, 2010).

One relevant variable that has received relatively little attention in the field is expertise. Recent works in empirical aesthetics have demonstrated that expertise predicts differential responses toward specific perceptual elements (Cleeremans, Ginsburgh, Klein, & Noury, 2016; Cotter, Silvia, Bertamini, Palumbo, & Vartanian, 2017), demonstrating that even if certain sensory inputs are generally prioritised over others during clothing evaluation, this may depend on individual differences, such as the age and fashion expertise of the evaluator.

1.3. Methodology and research question

This study's mixed-methods approach integrates both quantitative and qualitative data. Specifically, the research adopts a sequential exploratory design, which begins with qualitative data collection to inform subsequent quantitative analysis (Teddle & Tashakkori, 2008).

In the present work, Study 1 aimed to generate a set of key clothing-related sensory variables important for

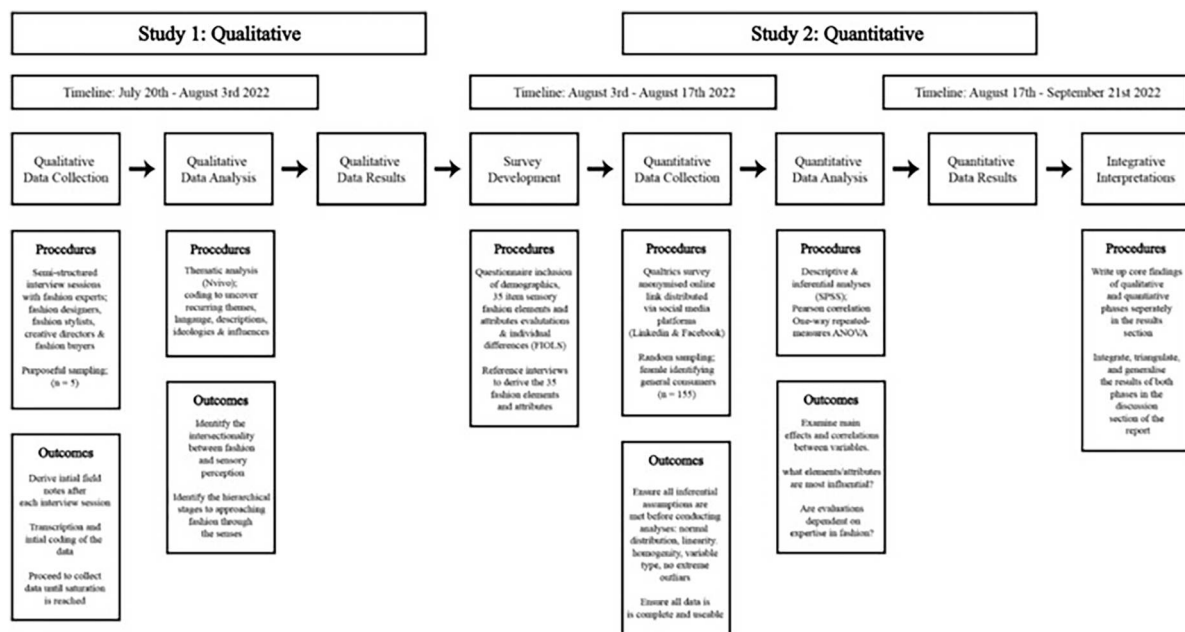


Figure 1. Study procedure.

evaluating clothing, as well as to gain a preliminary, exploratory understanding of the prioritisation of sensory attributes in clothing purchase decisions. Study 2 attempted to use these variables and generalise Study 1's findings across a diverse range of participants. Additionally, as a secondary exploratory analysis, Study 2 tested the limits of this generalizability by investigating the presence of individual differences, looking into the modulation of age and fashion expertise. [Figure 1](#) represents a visualisation of the study's progress. Both studies received ethical approval from the Psychology Ethics Review Panel at the London College of Fashion, University of the Arts London, and were conducted in accordance with the Declaration of Helsinki.

Accordingly, the following three research questions were formed: **RQ1.** What are some notable sensory attributes of clothing when it comes to purchase decisions (Study 1)? **RQ2.** Which of these sensory attributes are prioritised over others (Studies 1 & 2)? **RQ3.** Do age and fashion expertise relate to the prioritisation of certain sensory attributes (Study 2)?

2. Study 1

2.1. Methods

2.1.1. Participants

The study involved a purposeful sample of five fashion experts (three females; two males, ages 28-45), chosen for their industry expertise and diverse occupational roles, including fashion designers, buyers, creative directors, and stylists. See [Supplementary Material¹](#) for further details of each participant.

Participants were required to have at least five years of experience in senior roles in the fashion industry. The sampling of experienced professionals from a wide range of areas was intended to capture in-depth insights into clothing experience from a range of perspectives. Data saturation was reached after five participants were interviewed, a point at which additional interviews ceased to yield new information, thus confirming an adequate sample size for the study ([Faulkner & Trotter, 2017](#); [Morgan & Birtwistle, 2009](#)).

2.1.2. Materials

The qualitative phase included semi-structured interviews with each participant, including open-ended questions focused on the extraction of key sensory design elements during clothing evaluations (see [Supplementary Material](#) for full interview schedule). While the interview also covered a broader range of topics, the present theme was the primary focus, given the nature of the research.

2.1.3. Procedure

Data collection commenced with participants reviewing an information sheet and signing a consent form. The interviews, conducted either virtually or in person, were audio-recorded and lasted approximately 30 min in duration. Afterwards, participants received a debriefing sheet detailing the study's aims and providing health resources in the unlikely case any harm was experienced.

2.2. Results

Thematic analysis was conducted on the dataset. Three themes were identified: (1) the hierarchical influence stages of sensory elements in clothing evaluation, (2) the influence of sensory vision elements in clothing evaluation, and (3) the influence of sensory touch elements in clothing evaluation. For purposes of brevity, a more detailed version of the thematic analysis can be found in the [Supplementary Material](#).

The first theme highlighted the existence of sequential sensory stages influencing the perception and evaluation of clothing. Specifically, experts proposed a theoretical framework suggesting that consumers assess clothing in a hierarchical sensory order, based on the degree of influence of each perceivable element. The following distinct stages were identified: (1) visual elements, (2) tactile elements, and (3) auditory and olfactory elements.

The second theme highlighted the influence of visual sensory elements in clothing evaluation. Across all interview sessions, visual sensory elements emerged as a dominant focus, depicted as the most prioritised and fundamental aspect of clothing evaluation. The four most frequently mentioned components were colour, print, style, and proportions.

The third theme examined the influence of sensory touch elements in clothing evaluation, frequently highlighted across all interviews as a significant factor. Three design elements were identified as most impactful in relation to sensory touch: fabric, texture, and fit. Sequentially, touch elements were suggested to have a secondary influence, following visual elements. However, touch was emphasised as integral to clothing evaluation, while remaining distinctly independent of visual elements.

2.3. Discussion

To sum up, Study 1, representing the qualitative stage of the research, explored the various influences of sensory attributes in clothing evaluation. The experts proposed a hierarchical model to establish the multisensory

influential stages in clothing evaluation. There was an overall predominant focus on vision (i.e. colour, print, style, & proportion) and touch (i.e. fabric, texture, & fit). While smell and sound were discussed and included in the hierarchical stages, they were not further developed in conversation and were generally overlooked by the majority of experts. It is also worth noting that while the previous literature refers to fit as a visual element (e.g. Alexander et al., 2005), the participants in Study 1 emphasised fit to be part of the touch modality. Therefore, in subsequent parts of the present research, fit is considered within the context of touch instead of vision.

The results of Study 1 were utilised to inform the design of a survey (Study 2), aimed at the general public. While Study 1's sensory attributes were adopted as key adjectives in Study 2, another important purpose of Study 2 was to generalise the qualitative results, while also examining individual differences.

3. Study 2

3.1. Methods

3.1.1. Participants

This study sampled 155 female participants. The majority of participants were aged 18-30 ($N = 77$), followed by 31-50 ($N = 61$), 51-70 ($N = 12$), and then 71+ ($N = 5$). The survey was distributed online via LinkedIn and Facebook.

3.1.2. Materials

The survey had three key sections: demographics, sensory design evaluations, and fashion expertise. In the demographics section, participants provided basic information on their gender and age.

The second segment of the work aimed to measure the relevance of specific sensory design elements and physical attributes on clothing evaluations during purchase, via a survey method. Specifically, the survey items referenced the recurring themes of sensory design elements and attributes found in the thematic analysis of Study 1. This segment presented 35 items representing the relevance of sensory attributes such as colour, touch, and texture (11 core attributes consisting of colour, silhouette, print, construction, style, proportion, fabric, texture, fit, sound, & smell, and 24 additional sub-attributes; see Figure 3 for further details). Participants were asked to rate each item on a five-point Likert scale, from 1 (Strongly disagree) to 5 (Strongly agree), on the perceived influence of each of these attributes on purchase decisions, following the format of 'I consider the [attribute] of a garment influential when I

purchase everyday clothing.' Following this, as a separate question, participants were asked to rank four sensory experiences – vision, touch, sound, and smell – in chronological order when making purchase decisions for a garment.

The final component of the survey, fashion expertise, was measured through the fashion innovativeness and opinion leadership scale (henceforth FIOLS) developed by Hirschman and Adcock (1987). Given that the original scale measures one's propensity to be innovative in fashion and be a source of fashion advice, this measure was used to represent fashion expertise. The six items of FIOLS had a Cronbach's alpha coefficient of 0.85.

3.1.3. Procedure

The online survey was administered online via Qualtrics. Participants first read an information sheet, confirming voluntary participation and providing consent, prior to the main survey. A debriefing statement at the end outlined the study's aims and offered health resources in the unlikely case harm was experienced. On average, the survey completion time was approximately 10 min.

3.2. Results

The data were analyzed using IBM SPSS and R. Given that some of the continuous measures used in the analyses included a substantial number of outliers and since some measures were based on ranking data, Study 2's analyses, unless mentioned otherwise, adopted the Friedman test.

These tests assessed the relative influence of the following variables on clothing purchase decisions: (1) the 11 core sensory attributes; (2) where relevant, sub-attributes associated with a single core attribute; and (3) the processing order of the four sensory modalities.² For the Friedman tests, all *post hoc* pairwise comparisons were Bonferroni-corrected to adjust for the

Table 1. Descriptive statistics regarding the influence of core sensory attributes on purchase decisions.

	Mean	SD	Q1	Q2 (Median)	Q3	Mean Rank
Sound	3.12	1.20	2	3	4	3.21
Scent	3.19	1.18	2	3	4	3.38
Construction	4.04	0.97	3	4	5	5.47
Silhouette	4.13	1.05	4	4	5	5.91
Proportions	4.25	0.90	4	4	5	6.13
Print	4.32	0.92	4	5	5	6.38
Fabric	4.38	0.87	4	5	5	6.49
Texture	4.41	0.86	4	5	5	6.68
Style	4.57	0.81	4	5	5	7.29
Color	4.60	0.83	4	5	5	7.41
Fit	4.67	0.77	5	5	5	7.66

Note: The core sensory attributes are sorted in order of influence. All attributes had minimum and maximum ratings of 1 and 5 respectively.

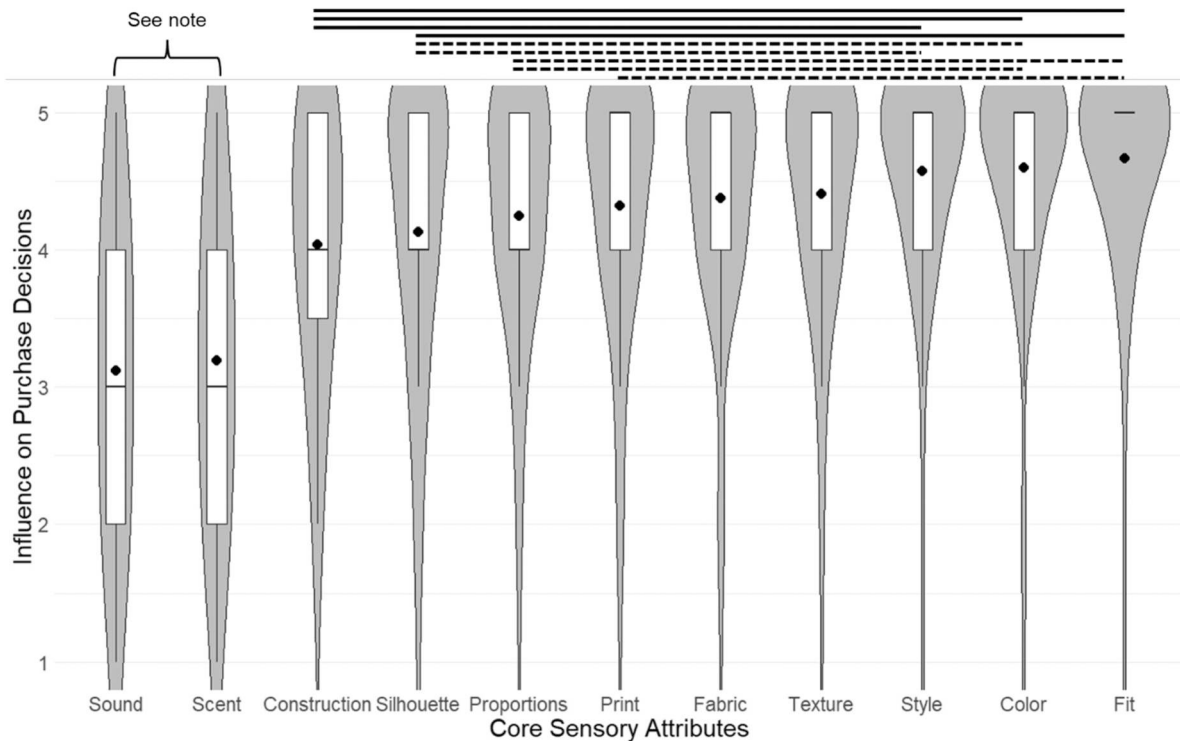


Figure 2. Visualisation regarding the influence of core sensory attributes on purchase decisions.

Note: The violin plot is based on raw data and includes a boxplot and mean (point) for each attribute. Lines above the plot represent significant pairwise comparisons (dotted lines: $p \leq .05$; bold lines: $p \leq .001$). For clarity purposes, the significance of the sound and scent attributes is not visualized; both attributes did not differ from each other, $p > .999$, while they differed significantly from the rest of the nine attributes, $p < .001$.

inflation of Type 1 error. Afterward, a set of Bonferroni-corrected Spearman correlations was calculated to explore the relationship between the measures of individual difference (i.e. age and fashion expertise) and all 35 sensory attributes and the four modalities from the modality order question. The raw dataset has been deposited in a trusted repository (<https://doi.org/10.6084/m9.figshare.32896868>).

3.2.1. The influence of the core sensory attributes

A significant main effect emerged regarding the relative importance of the core sensory attributes on purchase decision, $\chi^2(10) = 446.56$, $p \leq .001$, $W = .29$. A *post hoc* pairwise comparison revealed that smell and sound scored the lowest out of all 11 core sensory attributes.

Table 2. Descriptive statistics regarding the perceived chronological processing order of modality during purchase decisions.

	Mean (Mean Rank)	SD	Q1	Q2 (Median)	Q3
Smell	3.46	0.63	3	4	4
Sound	3.35	0.66	3	3	4
Touch	2.12	0.50	2	2	2
Vision	1.06	0.25	1	1	1

Note: The modalities are sorted in order of influence. All modalities but vision had minimum and maximum rankings of 1 and 4 respectively; vision's rankings ranged from 1 to 2.

The two attributes did not differ from each other, $p > .999$, but both differed significantly from the remaining attributes, $p < .001$. Style, colour, and fit lie at the other end of the spectrum. Descriptive statistics and visualisation can be found in Table 1 and Figure 2, respectively.

3.2.2. The influence of the sub-attributes

As can be seen in Figure 3, some of the core sensory attributes included a number of sub-attributes. Of the sub-attributes, opacity, softness, and comfort appeared to play important roles in their respective core sensory attributes. A detailed analysis of this section can be found in the Supplementary Material.

3.2.3. The influence of modality

As an alternative measure of modality prioritisation, how do people generally consider vision, touch, sound, and smell in terms of their chronological impact on clothing purchasing decisions? The Friedman test revealed a significant effect, $\chi^2(3) = 359.82$, $p \leq .001$, $W = .77$. A *post hoc* pairwise comparison revealed vision to be ranked higher than all other modalities, $p < .001$. This was followed by touch, which was significantly higher ranked than sound and smell, $p < .001$; the latter pair did not significantly differ from each other, p

Table 3. Correlation table across the 35 sensory attributes, age, and fashion expertise.

	Age	Fashion Expertise (FIOLS)
Color	.00	-.06
Tint	.04	-.01
Shade	.00	.05
Tone	.01	.05
Print	-.10	.12
Style	-.11	.17
Trendiness	-.15	.16
Uniqueness	-.08	.31
Simplicity	-.05	.10
Silhouette	-.05	.17
Suitability	-.01	.00
Proportions	-.07	.07
Length	.02	.00
Width	-.03	.08
Size Scalability	-.03	.06
Scent	.07	.16
Pleasant Scent	.10	.09
Unpleasant Scent	-.04	-.03
Fabric	-.12	.01
Weight	.03	.23
Opacity	-.04	-.03
Elasticity	.03	.05
Texture	-.03	.11
Softness	-.07	.07
Scratchiness	-.12	.08
Smoothness	.01	.12
Roughness	-.11	-.05
Construction	.13	.23
Fit	-.12	.02
Comfort	.08	-.01
Looseness	-.07	-.01
Tightness	-.03	.02
Sound	.06	.14
Noisy	.08	.06
Quiet	.10	.07
Modality_Vision	.09	-.14
Modality_Sound	.09	.05
Modality_Touch	.19	.03
Modality_Smell	-.18	-.06

Note: Numbers represent the correlation coefficient (Spearman's ρ). Statistical significance with Bonferroni correction ($p \leq .05$) is denoted in **underlined bold**.

= .455. In sum, in the context of purchasing clothing, people report prioritising vision first, then touch, before considering sound and smell to equal degrees. Descriptive statistics can be found in Table 2.

3.2.4. The modulating role of individual differences

Given the large number of correlations (i.e. a total of 78), the Bonferroni correction adjusted the threshold of statistical significance to .0006.³ Once this adjustment was made, there was one statistical significance, namely a positive correlation between fashion expertise and the importance of stylistic uniqueness during clothing purchase decisions, $\rho = .31$, $p = .0000775$. This means that the more one perceives oneself as an expert in fashion, the more one looks for stylistic uniqueness when choosing clothes to buy. No other correlations were significant (this sole significance emerged even after relaxing

the significance threshold to .001). The full correlation table is found below in Table 3.

3.4. Discussion

Study 2 examined the influence of sensory attributes on clothing evaluations during purchase decisions. In generalizing the findings from Study 1, the data indicated the importance of vision, followed by touch, and then, to equal degrees, smell and sound. The general lack of individual differences indicated that the prioritisation of certain sensory attributes was largely generalisable across all age groups and expertise levels. That said, the study still observed fashion expertise to be a positive predictor of the prioritisation of stylistic uniqueness. Figure 3 represents a schematic summary of the study's general findings.

4. General discussion

The purpose of this research was to examine the influence of sensory attributes in clothing evaluation. Across two studies (an exploratory qualitative study followed by a survey study), the research explored the prioritisation of sensory attributes during clothing purchase decisions. The study also assessed the role of individual differences to understand the generalizability of the findings.

Across both studies, there was preliminary evidence pointing to the presence of a hierarchy of sensory processes during clothing purchase evaluation. Study 1 suggested the following prioritisation of influence: (1) vision, (2) touch, and (3) sound and smell. While visual and touch elements had a clear prioritisation, sound and smell elements were interpreted as being less influential in comparison and interchangeable in their order of significance. These results were replicated in Study 2, which demonstrated that the processing of visual elements was followed by touch elements; this was then followed by sound and smell elements. It should also be noted that Study 2's results confirmed both temporal and psychological prioritisation. Regardless of temporal sequence, participants generally considered visual and touch elements to be more influential in their purchase decisions. Conversely, participants thought there was a clear chronological order of modality during the evaluation.

This consistency of findings across both studies aligns with previous research, which reported the predominance of both visual and touch elements while assessing clothing and relatively less consideration of the influences of sound and smell (Eckman et al., 1990; Grohmann et al., 2007; Workman, 2010;

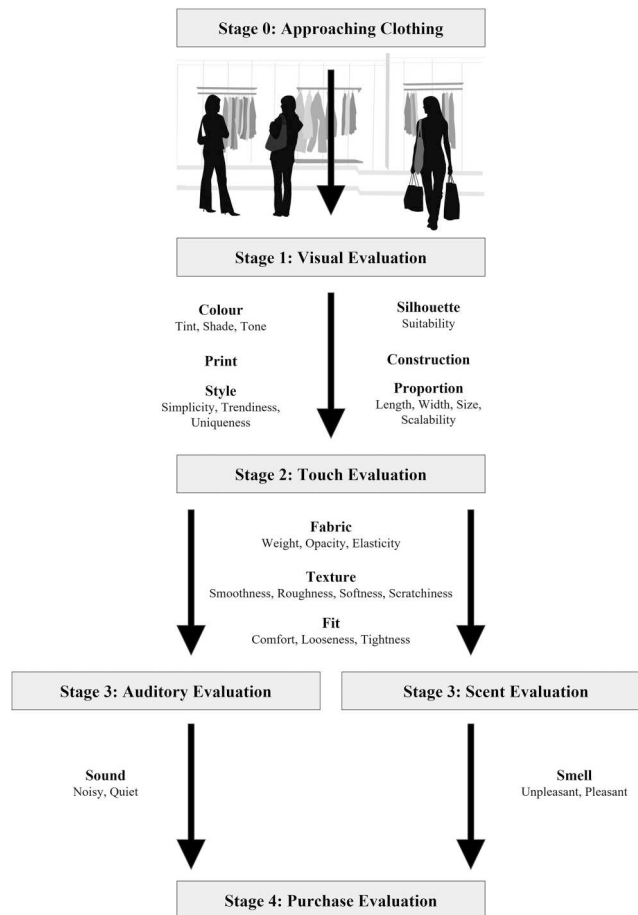


Figure 3. Visualisation regarding the study's findings and implications.

Workman & Caldwell, 2007). In particular, the prioritisation of vision is comparable to recent works in empirical aesthetics (e.g. Chatterjee, 2004), which assume vision to be an integral component in the aesthetic evaluation of objects.⁴

To what can one attribute this prioritisation of vision during clothing purchasing? On the one hand, visual aspects of clothing readily convey a wide range of messages, from social status and personal taste (Hester & Hehman, 2023) to personality (Hur et al., 2023). Especially given that visual information can be accessed easily as opposed to touch, smell, and sound, the latter of which may require certain proximity to the clothing, the prioritisation of visual information may provide an important cue for clothing purchase decisions. On the other hand, the visual cortex, in which visual information is processed, forms a substantial area of the human brain, larger than areas representing the processing of touch, smell, and sound (Wandell et al., 2009).

That said, this is not to say that all visual components are treated alike. Results from Study 2 demonstrated that although colour and style both made important contributions when making purchase decisions (supporting the literature, which claims both colour and

style to be predominant influences in the evaluations of clothing, such as by Barquet & Balam [2015]; Kodzoman et al. (2022), other visual attributes such as proportion and silhouette were less so. Similarly, the visual attribute of stylistic uniqueness was more important for those high in fashion expertise compared to those low in the expertise measure. This evidence suggests caution when it comes to broad generalisations regarding the prioritisation of vision.

4.1. Limitations and future directions

This research also presents some limitations. While the study represented a general exploration into sensory attributes in the evaluation of everyday clothing, there is no guarantee that these results are generalisable across all clothing categories. Especially given that different types of clothing may be associated with different clothing functions (Hur et al., 2025), the differing motivations underlying specific types of clothing may call for different levels of sensory relevance (e.g. functional clothing may require a larger consideration of touch than vision). It also goes without saying that while the study explored the broad relevance of sensory attributes,

it did not explore the variations that exist within each attribute (e.g. when people consider colour to be an influential sensory attribute, is there a type of colour that people are looking for?). Nor has the work, despite the general replication of findings across two methodologies and the resulting evidence of reliability (at least using self-report measures of clothing purchase experience), explored actual purchase behaviour, which may limit ecological validity. These questions may be explored via experimental methodologies involving real-life activities, which would provide a more nuanced yet more realistic and generalisable picture of the sensory mechanisms underlying everyday clothing purchase experiences.

Furthermore, although the work adopted age and fashion expertise as means of exploring individual differences, future studies could broaden the type and range of measures. Studies could, for instance, measure an individual's specific propensity (e.g. need for touch; Cho & Workman, 2011) or sensitivity (e.g. sensory hypersensitivity; Dixon et al., 2016) to certain modalities. They could, in turn, explore whether people who are generally more responsive to certain modalities might also show greater responsiveness in the context of clothing consumption. Relatedly, studies could broaden the participant group to better represent the consumer population, including male participants and varying cultural contexts as well, which would enable both a measure of individual differences and also comment on the generalizability of the present findings. Indeed, previous works have implicated gender differences in fashion consumption (Hur et al., 2023; O'Cass, 2004).

4.2. Implications

This research presents both theoretical and practical implications. By highlighting the possible hierarchical stages of sensory processing during clothing consumption, the research contributes to the understanding of cognitive processes underlying clothing purchase. This builds on previous works that explored the role of senses in the context of retail and marketing environments (Krishna, 2012; Lund, 2015; Soars, 2009) but which did not – despite clothing's multisensory nature – examine their relative roles in the context of clothing purchasing decisions. This was achieved through a mixed-method design, in which a novel approach was both explored and confirmed.

Practically, the present work's findings may be beneficial for fashion companies to make informed product decisions, focusing on the senses of vision and touch.

While there is much future research to be done, this line of research may assist in reducing the costs associated with experimenting with various design elements, oftentimes resulting in unethical amounts of obsolete inventory, and may optimise time spent identifying consumer demands (Fisher, Rajaram, & Raman, 2001).

Notes

1. All supplementary material of this work can be found here: <https://doi.org/10.6084/m9.figshare.32896868>
2. Please note that the analysis is based on the individual attributes rather than on the higher-level constructs represented by those attributes. This decision was made for two main reasons. First, the individual attributes, many of which are derived from the interview data in Study 1, are assumed to reflect higher-level conceptualisations to some extent. Second, because the present analysis provides preliminary evidence for a hierarchical sensory evaluation of clothing, retaining the individual attributes as measured retains a useful level of descriptive granularity. As noted above, the raw dataset has been made available, and it may be used for those who wish to further examine the relationships among the individual attributes.
3. $0.05/78 = 0.0006$
4. While this provides valid supporting evidence, it may also represent biased support, given that most research and research stimuli in empirical aesthetics concern visible objects in the first place (e.g., artworks, nature, etc).

Author contributions

CRedit: **Chloe Jacobsen**: Conceptualization, Data curation, Formal analysis, Investigation, Methodology, Project administration, Visualization, Writing – original draft; **Young-Jin Hur**: Conceptualization, Data curation, Formal analysis, Methodology, Project administration, Supervision, Visualization, Writing – original draft, Writing – review & editing.

Disclosure Statement

No potential conflict of interest was reported by the author(s).

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References

- Alexander, M., Connell, L. J., & Presley, A. B. (2005). Clothing fit preferences of young female adult consumers. *International Journal of Clothing Science and Technology*, 17(1), 52–64.
- Barquet, J., & Balam, E. M. (2015). Clothing preferences of college students: What factors matter. *Journal of Undergraduate Ethnic Minority Psychology*, 1(1), 4–6.

- Barthes, R. (2006). *The language of fashion*. (A. Stafford, Trans.). New York: Berg.
- Bell, S. S., Holbrook, M. B., & Solomon, M. R. (1991). Combining esthetic and social value to explain preferences for product styles with the incorporation of personality and ensemble effects. *Journal of Social Behavior and Personality*, 6(6), 243.
- Chatterjee, A. (2004). Prospects for a cognitive neuroscience of visual aesthetics. *Bull. Psychol. Art*, 4, 55–60.
- Cho, S., & Workman, J. (2011). Gender, fashion innovativeness and opinion leadership, and need for touch: Effects on multi-channel choice and touch/non-touch preference in clothing shopping. *Journal of Fashion Marketing and Management: An International Journal*, 15(3), 363–382.
- Chowdhary, U., & Beale, N. V. (1988). Plus-size women's clothing interest, satisfactions and dissatisfactions with ready-to-wear apparel. *Perceptual and Motor Skills*, 66(3), 783–788.
- Cleeremans, A., Ginsburgh, V., Klein, O., & Noury, A. (2016). What's in a name? The effect of an artist's name on aesthetic judgments. *Empirical Studies of the Arts*, 34, 126–139. doi:10.1177/0276237415621197
- Cotter, K. N., Silvia, P. J., Bertamini, M., Palumbo, L., & Vartanian, O. (2017). Curve appeal: Exploring individual differences in preference for curved versus angular objects. *i-Perception*, Advance online publication. doi:10.1177/2041669517693023
- Dixon, E. A., Benham, G., Sturgeon, J. A., Mackey, S., Johnson, K. A., & Younger, J. (2016). Development of the Sensory Hypersensitivity Scale (SHS): A self-report tool for assessing sensitivity to sensory stimuli. *Journal of Behavioral Medicine*, 39, 537–550.
- Eckman, M., Damhorst, M. L., & Kadolph, S. J. (1990). Toward a model of the in-store purchase decision process: Consumer use of criteria for evaluating women's apparel. *Clothing and Textiles Research Journal*, 8(2), 13–22.
- Faulkner, S. L., & Trotter, S. P. (2017). Theoretical saturation. In J. Matthes, C. S. Davis, & R. F. Potter (Eds.), *The International encyclopedia of communication research methods* (pp. 1–2). Wiley.
- Fisher, M., Rajaram, K., & Raman, A. (2001). Optimizing inventory replenishment of retail fashion products. *Manufacturing & Service Operations Management*, 3(3), 230–241.
- Garlin, F. V., & Owen, K. (2006). Setting the tone with the tune: A meta-analytic review of the effects of background music in retail settings. *Journal of Business Research*, 59(6), 755–764.
- Grohmann, B., Spangenberg, E. R., & Sprott, D. E. (2007). The influence of tactile input on the evaluation of retail product offerings. *Journal of Retailing*, 83(2), 237–245.
- Helme Falk, M., & Berndt, A. (2018). Shedding light on the use of single and multisensory cues and their effect on consumer behaviours. *International Journal of Retail & Distribution Management*, 46(11/12), 1077–1091.
- Hester, N., & Hehman, E. (2023). Dress is a fundamental component of person perception. *Personality and Social Psychology Review*, 27(4), 414–433.
- Hirschman, E., & Adcock, W. (1987). An examination of innovative communicators, opinion leaders, and innovators for men's fashion apparel. In H. Keith Hunt (Ed.), *Advances in consumer research* (pp. 303–314). Ann Arbor, MI: Association for Consumer Research.
- Hogge, V. E., Baer, M., & Kang-Park, J. (1988). Clothing for elderly and non-elderly men: A comparison of preferences, perceived availability and fitting problems. *Clothing and Textiles Research Journal*, 6(4), 47–53.
- Hur, Y. J., & Burechittinanta, B. (2026). The model effect: How the facial attractiveness of a model shapes clothing evaluation. *British Journal of Psychology*, 1–19. doi:10.1111/bjop.70099
- Hur, Y. J., Etcoff, N. L., & Silva, E. S. (2023). Can fashion aesthetics be studied empirically? The preference structure of everyday clothing choices. *Empirical Studies of the Arts*, 41(2), 525–545.
- Hur, Y. J., Segal, N. L., Etcoff, N. L., & Silva, E. S. (2025). Understanding the psychology of fashion: Demographic, personality, and fashion factors underlying everyday clothing choices in the United Kingdom and United States. *Psychology of Aesthetics, Creativity, and the Arts*, Advance online publication. doi:10.1037/aca0000766
- Kim, J. H., & Lee, Y. J. (2010). A study on clothing purchasing behavior and preference images of the fashion items according to the age groups of the elderly woman. *Journal of the Korean Society for Clothing Industry*, 12(3), 279–290.
- Ko, E., Lee, E. J., Kim, K. H., Oh, N., & Yin, M. (2025). Clothing design factors, aesthetic experience, and preference: Additional insights from neuro marketing in civil defense clothing. *Journal of Global Fashion Marketing*, 16(2), 257–277.
- Kodžoman, D., Hladnik, A., Pavko Čuden, A., & Čok, V. (2022). Exploring color attractiveness and its relevance to fashion. *Color Research & Application*, 47(1), 182–193.
- Krishna, A. (2012). An integrative review of sensory marketing: Engaging the senses to affect perception, judgment and behavior. *Journal of Consumer Psychology*, 22(3), 332–351.
- Leder, H., Belke, B., Oeberst, A., & Augustin, D. (2004). A model of aesthetic appreciation and aesthetic judgments. *British Journal of Psychology*, 95, 489–508. doi:10.1348/0007126042369811
- Lund, C. (2015). Selling through the senses: Sensory appeals in the fashion retail environment. *Fashion Practice*, 7(1), 9–30.
- Milliman, R. E. (1986). The influence of background music on the behavior of restaurant patrons. *Journal of Consumer Research*, 13(2), 286–289.
- Morgan, L. R., & Birtwistle, G. (2009). An investigation of young fashion consumers' disposal habits. *International Journal of Consumer Studies*, 33(2), 190–198.
- Neacșu, N. A., Balasescu, S., Baltescu, C. A., & Boșcor, D. (2017). The influence of design and aesthetics elements in choosing clothing. *De Redactie*, 375.
- O'Cass, A. (2004). Fashion clothing consumption: Antecedents and consequences of fashion clothing involvement. *European Journal of Marketing*, 38(7), 869–882.
- Reid, A., Lancuba, V., & Morrow, B. (1997). Clothing style and formation of first impressions. *Perceptual and Motor Skills*, 84(1), 237–238.
- Soars, B. (2009). Driving sales through shoppers' sense of sound, sight, smell and touch. *International Journal of Retail & Distribution Management*, 37(3), 286–298.
- Spangenberg, E. R., Sprott, D. E., Grohmann, B., & Tracy, D. L. (2006). Gender-congruent ambient scent influences

- on approach and avoidance behaviors in a retail store. *Journal of Business Research*, 59(12), 1281–1287.
- Teddlie, C., & Tashakkori, A. (2008). *Foundations of mixed methods research: Integrating quantitative and qualitative techniques in the social and behavioral sciences*. Thousand Oaks, CA: SAGE Publications.
- Wandell, B. A., Dumoulin, S. O., & Brewer, A. A. (2009). Visual cortex in humans. *Encyclopedia of Neuroscience*, 10, 251–257.
- Workman, J. E. (2010). Fashion consumer groups, gender, and need for touch. *Clothing and Textiles Research Journal*, 28(2), 126–139.
- Workman, J. E., & Caldwell, L. F. (2007). Centrality of visual product aesthetics, tactile and uniqueness needs of fashion consumers. *International Journal of Consumer Studies*, 31(6), 589–596.
- Workman, J. E., & Kidd, L. K. (2000). Use of the need for uniqueness scale to characterize fashion consumer groups. *Clothing and Textiles Research Journal*, 18(4), 227–236.
- Yoganathan, V., Osburg, V. S., & Akhtar, P. (2019). Sensory stimulation for sensible consumption: Multisensory marketing for e-tailing of ethical brands. *Journal of Business Research*, 96, 386–396.